AN ECONOMIC COMPARISON BETWEEN THE SHENZHEN SPECIAL ECONOMIC ZONE AND THE EXPORT PROCESSING ZONES IN ASIA

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Prelude

CHAPTER 1

Introduction

The idea of EPZ actually originated from the concept of "Free trade zone", which was established in some advanced industrial countries, such as the U.S., as early as 1930's. After mid 70's, the development of EPZ in Asia grew rapidly and the number of EPZs in Asia gradually surpassed those in the western world. Even though "EPZ" is the generic term used commonly, other names such as "Free Export Zone", "Investment Promotion Zone", "Industrial Estate", etc. have been used quite often by different countries. They do, however, carry more or less the same set-up objectives. There are four major objectives which we will discuss in Chapter 3 of this report.

In third world countries, the most attractive feature about setting up an EPZ lies in its contribution to the country's modernization. These countries realize that in the journey of developing the nation, they need to have foreign capital, technology, and overseas markets. If they can provide a small area whereby they can give special incentives to foreign investors in terms of political, economic, and financial flexibility, they will attract the investors to establish some industries in that area. In that way, not only the countries can earn foreign exchange, provide more job opportunities, and

develop more overseas market links, they can also speed up the nation's industrial modernization via Technology Transfer - The upmost important objective of setting up an EPZ in an underdeveloped country.

The establishment of EPZ also created some problems to any country. The more common ones are : conflict of interest between the EPZ and the other industrial zones of the country. Normally the "one country two systems" approach in terms of political and economic administration does not always operate in harmony. The other ones would be bureaucracy and collusions. All these side effects will more or less affect the success/failure of the EPZ which will be summarized in the later section.

Since the proposal of setting up the four Special Economic Zones (SEZs) in China was approved in the Chinese People Representatives Congress in August 1980, there have been numerous documents and articles published to discuss the different aspects of the four Special Economic Zones. With the continued progress of the SEZs in the last few years, reports that describe the economic status, industrial investments and urban construction, of the SEZs and papers that comment on their success and failure can be found in numerous sources. There have been, however, very few books and articles which try to compare the four China SEZs with the other existing SEZs in different parts

of the world. Such comparison would be very interesting and meaningful because all SEZs in the world share the same commonality to a certain extent. And yet, due to the diversities in cultures, economic needs and types of governments, they are different in their set up objectives and the results yielded.

This paper tries to compare the ShenZhen SEZ with other Export Processing Zones (EPZ) in Asia. Comparisons will be made on their initial objectives, their quantitative and qualitative economic achievements. In order to assure that we are measuring the same variables, we will use the result reached at the end of the 5th year period after a zone has been established for comparison. From these comparisons, we hope to find out whether China SEZ are more efficient than the other EPZs and why they are so in some areas.

In so doing , the paper will be divided into 5 sections. Section I will give a brief introduction of the content and a description of the methodology used in this research paper. Section II gives an overview of the SEZs, or rather EPZs (Export Processing Zones) in the other parts of Asia. Also provided is a summary on the major achievements of these EPZs. Section III will analyze the developmental stages of Chinese economy and explain why & how the SEZ concept can be materialized. For the sake of

convenience, we will use ShenZhen SEZ as the representing zone. Emphasis on this section will be placed on the economic growth of the ShenZhen SEZ, which will be used to compare with other EPZ's in Section IV. Section IV gives a comparison between ShenZhen SEZ and the other EPZs in terms of regulations and economic performances etc. From the comparison, we hope to draw some conclusions concerning the results of the ShenZhen SEZ.

Finally, in the concluding section, we then will include critques and recommendations for the ShenZhen SEZ.

CHAPTER 2

Methodology

In the following, we shall specify the kind of resources that have been obtained, the way they are gathered and utilized.

(A) Resources :

There are mainly two methods in obtaining the necessary resources.

1. By searching existing information

Types of information	Sources
Complete textbooks about SEZs, and EPZs	CUHK Library
Guidebooks, handbooks about SEZs in China	Commercial bookstores
Magazines in this field	CUHK Library
. Economic Reporter	- DITTO -
. Insight	- DITTO -

. HK Industrial News	- DITTO -
. China Source	- DITTO -
. China Traders	- DITTO -
. Asia Business	- DITTO -
. The 90's	- DITTO -
. The 70's	- DITTO -
. Economic Weekly	- DITTO -
. Mirror Monthly	- DITTO -
. Asia Construction	- DITTO -
. People Monthly	- DITTO -

Newspaper Clippings from	Far East Economics Reviews
. South China Morning Post	- DITTO -
. HK Standard	- DITTO -
. Chineses Newspaper	- DITTO -

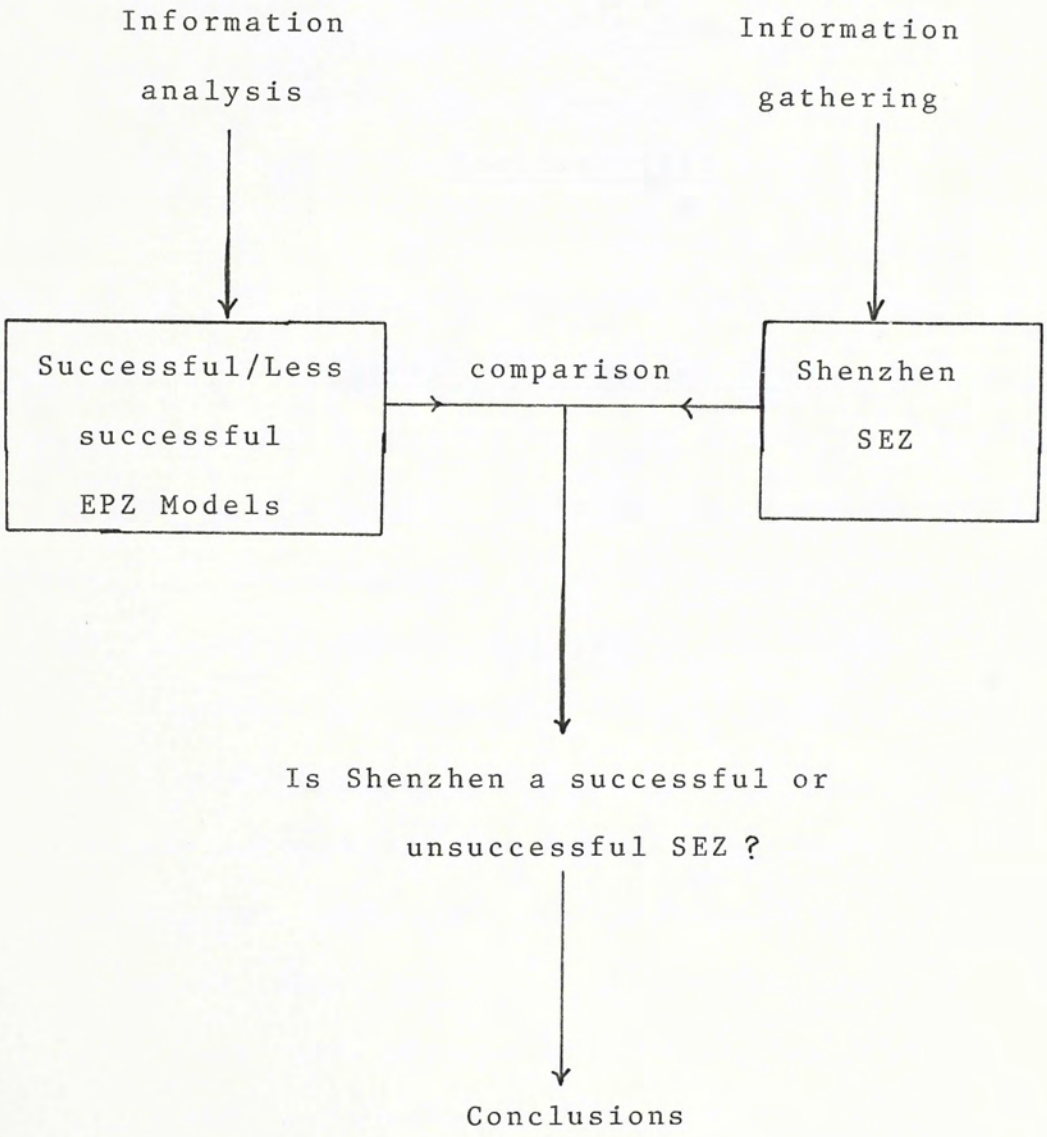
2. By Interviewing

We have also conducted a few interviews with people who work in China, government officials, foreign investors. Their comments are of high value since they are not easily located in any

documents. In fact, we have found that even published data are not very reliable as they tend to be different from one source to the others.

(B) Resource Utilization :

In addition to obtaining the resources as described above, we need to strategise how to use them. In Section II, we will investigate the development of the EPZ in Asia. After analyzing the information gathered, we will eventually draw a conclusion on why some EPZs are successful and why others are not. In this way, 2 models are built, namely, the "Successful EPZ model" and the "Less Successful EPZ model". In Section III, when the Shenzhen SEZ is compared with the EPZs, it is actually a comparison basing on the models built in Section II. In fact, a graphical layout is drawn as below for better understanding.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Section (II)

Export Processing Zones

in

Asia

CHAPTER 3

The Background and Development of Export Processing Zones (EPZs) in Asia

According to The United Nations Industrial Development Organization (UNIDO), the definition of an Export Processing Zone (EPZ) can be written as "Industrial Free Trade Zones as Incentives to Promote Export Oriented Industries[1]". The concept of such definition involves the establishment of modern manufacturing plants inside an industrial estate by offering a suitable package of investment incentives to both foreign and domestic entrepreneurs. Export Processing Zones (EPZ) is by no means new in Asia. Since the establishment of the first EPZ in Ireland back in 1956, countries in Asia have embarked on their own program of setting up EPZs. Among them, Taiwan and India were the first ones to start in the sixties. As to the SEZs in China, the focus of this study, they are new comers. By 1987, 12 countries in Asia have their own versions of EPZ or SEZ in operation.

Table 1 shows the geographic spread of the zones.

1 See Bibliography

South Asia	No.	S.E. Asia	No.	North Asia	No.
Sri Lanka	2	Indonesia	2	Taiwan	3
India	2	Malaysia	10	Korea	2
Pakistan	1	Philippines	5	China	4
Bangladesh	1	Thailand	1		
	---		---		---
No. of zone :	6		18		9

Table 1 Georgraphical Spread of Asia's EPZs

Both Hong Kong and Singapore are more appropriately classified as free ports, and are excluded from the tabulation above. While the objectives of these countries in setting up SEZ or EPZ are not exactly the same, they nevertheless resemble each other in many aspects. The key objectives listed by most are :

1) To attract foreign investments
2) To promote and develop export
3) To create job opportunities
4) To facilitate transfer of technology

Some countries are very successful in fufilling the objectives for their EPZs, while others are not flaring as well. Those succeeded have since evolved into a more sophisticated phase of economic development. A case in point is Taiwan, which has one of the most successful records for its EPZs(the first EPZ is Kaoshiung opened in 1966). The success has led to labor shortage and escalated land cost. In the mid 1970's, the government shifted its emphasis to capital and technology intensive industries for further economic development. The original EPZ has been modified with the establishment of science-based industrial parks offering investment incentive to high-tech industries. In the mean time, the tax holiday previously enjoyed by many "traditional" labor intensive industries in EPZ are waived so as to discourage further investment in such industries.

Malaysia, likewise has enjoyed great success with its 10 EPZs. Since the early 80's, new applications for investment in these EPZs are no longer accepted. The government had in the early 1980's moved preference for setting up new zones in the east coast as an attempt to develop the backward economy there.

CHAPTER 4

An Overview of Asia's EPZs

Due to the differences in backgrounds and history among the EPZs, it is unnecessary and irrelevant to present a detailed account of all major zones in Asia. Instead, a summary highlighting the current status of the major EPZs is given below. It is intended to serve as a basis for comparison with the Shenzhen SEZ in P.R. China in the later chapter of this report.

(A) Sri Lanka*

The investment promotion zone located at Kathunayake is close (29 km) to the capital city of Colombo. It has started operation since 1979. The zone was targeted as a key to the government's strategy of investment promotion. As such the incentives offered are practically the best anywhere in the region. A 10-year tax holiday on corporate and personal taxes and 99-year lease period are among the many incentives offered. Unskilled labor is in abundant supply at low-cost. Yet with an literate rate of 80%, they are early to train.

* The country information are adpoted from 2.

Owing to the strong support from the government, the zone is comparatively free of red tape for a developing country. Greater Colombo Economic Commission (GCEC) is the only authority overseeing the zone, thus allowing all required processing be organized through it efficiently.

The zone has enjoyed considerable success. In the first three years of operation, total export derived from the zone was Rs1.4 billion with 20-25% domestic value added. By the end of this period, about 62 factories were either in production or under construction. Labor intensive light industries are the prime investors in the zone.

The second zone at Biyagama, 14 km from Colombo, had been planned to come in operation by 1984-85. It is specifically catered for those industries with heavy demand for water. No solid data is yet available to allow a meaningful assessment on its performance.

One constraint to the steady development of the EPZ in Sri Lanka is the political turmoil which has been with the countries since the early 80's.

(B) India

India has two EPZs : the Santa Cruz Electronics Export Processing Zone (SEEPZ) which started in 1974 and the Kandla Free Trade Zone (KFTZ) in Gujarat, which started in 1985.

SEEPZ

As the name implies, the target of the SEEPZ is to promote exports of electronics-related goods. It's located 35 km from Bombay and 6 km from Santa Cruz Airport. As EPZs were apparently not a central element of the country's development strategy, there has been a lack of enthusiasm from the government on promotion. This resulted in low level of participation from overseas investors. In the first eight years of operation, less than 40 units were in place with many of them barely functional. The bureaucratic management style of SEEPZ is blamed for its disappointing performance of the zone. In addition, the incentives offered to investors are not at par with other rival countries in the region.

KETZ

The Kandla Free Trade Zone (KFTZ) is located on the

west coast of India, at Gujarat State about 10 km from Kandla Port. While its start-up dated back to '65, the poor infrastructure had seriously discouraged investors' interest. Only until 1980, with the rise of a new state government has KFTZ turned-around. Establishment of flight service, improved train services and regular port of call for Kandla were the key factors contributed to revival of the zone. Before the port of call was inaugurated at Kandla, most of the import and export from KFTZ had to route through Bombay which is 800 km away!

Fiscal incentives are essentially the same as in SEEPZ. Government Soft Loan and 15% subsidy on fixed capital investment are added attractions. The red tape was nevertheless also similar to the SEEPZ.

(C) Pakistan

Pakistan is a relatively late entrant in setting up EPZ. The Karachi Export Processing Zone (KEPZ) started operation in '84. It is situated near the Karachi Port and Karachi International Airport. The initial promotion theme for KEPZ was its proximity to the consumer markets of the Middle East. The incentives offered include a 5-year tax holiday, after which only 25% of normal tax is required within

the zone for the next 5 years.

KEPZ has fell victim to the diminishing interest in the Gulf market where imports have declined as a result of weak oil prices. This is further complicated by the major problem of disagreement between government department in Pakistan about rules governing the zone. Thus results in the said incentive package being less attractive than those offered by the competing countries.

Against the original forecast that some 400 factories would be established by 1987, with annual export of US$125 million, only 15 factories had actually been commissioned with total export since start-up amounted to only US$17 million (1984-87).

(D) Indonesia

Indonesia has two major EPZs. One is located at Jakarta's Tanjung Priok harbor, known as Pelabuhan Nusantara, and another one at Batam Island. These zones in fact closely resemble Bonded Warehouses in practice than EPZs, with few special incentives provided to investors in the zone. Concessions such as tax exemptions and tax holidays must be negotiated with the Investment Board according to individual cases.

The advantage of investing in these zones are that there are less red tape than outside the zones, although it is still considerable as compared to the other rival countries.

Pelabuhan Nusantara

The zone is 11 hectares in area. It is close to Jakarta with its convenience in banking and transportation. Export-oriented and labor-intensive light manufacturing are the types of investments encouraged by the authority.

Batam Island

The Island is 20 km southeast of Singapore. The initial objective of developing Batam Island is that it would benefit from the business spillover from Singapore due to its proximity. Furthermore, it was considered as an alternative for labor-intensive industries that no long found Singapore attractive because of substantial escalation in labor and land cost.

The zone offers a six-year tax holiday plus other incentives for export-oriented business. Nevertheless, due to inadequate infrastructure for

which improvement has been slow to come by, the Island is less than successful in attracting investments as planned.

Majority of the companies operating on the Island are in the petroleum support industris. Their establishment was due to change in government regulations few years ago requiring relocation of Bonded Warehouse inside the country from Singapore. Otherwise, voluntary investments on the Island has been below expectation.

(E) Malaysia

Malaysia has more than 10 EPZs located primarily along the west coast and in the south. They are in the States of Penang, Selangor, Malacca, Johore and Kedah. All the EPZs are strategically located near airports or ports and average only five miles from a port of entry.

High-tech and resource-based industries are the preference in the EPZs by the government. Unlike many other rival countries, the incentive granted to investors in Malaysia's EPZs are not standard. It is linked to the type of industries, and the evaluation is conducted by the authority on a case-by-case basis.

Malaysia's EPZs are highly successful with most of them fully occupied. Total investment exceeds US$200 million, with more than 60,000 people employed by factories inside the zones. Labor shortage has in general become a problem. This prompted the government to shift its priority to the less developed east coast since the early eighties.

(F) Thailand

The only EPZ in Thailand is located in an earlier established Industrial Estate at Lard Krabang. The country also has a number of other industrial estates and investment promotion zones that offers nearly as attractive incentives and good infrastructure. They are however not catered for export-oriented industries.

Lard Krabang EPZ is 30 km from Bangkok port and 35 km from the Don Muang International Airport. The zone is 28 hectares in size. Export-oriented business especially those using Thailand's low-cost labor and processing Thai raw materials are welcomed. Labor-intensive electronic industries are also encouraged investment targets. The zone was opened in 1982 and no detail data is available to assess its performance.

(G) Philippines

The most established EPZs in Philippines are at Bataan, Mactau and Baguio, with few other zones developed more recently in Cavite and Davao City.

The government categorizes zone industries as specially treated enterprises and has reduced red tape to the minimum. The Philippines labor force is an important asset which made its SEZs remain attractive for labor-intensive industry. Despite the set-back caused by political turmoil in recent years, low wages and productive work force are its strength. Other incentives offered in the zones are nevertheless not as competitive as elsewhere. For example, a comprehensive "tax holiday" is not available.

Bataan Export Processing Zone (BEPZ)

It is the most developed EPZ in the Philippines. Located at 160 km from Manila in the Southern tip of Bataan Peninsula, it has an area of 350 hectares. Light, medium and heavy industries are all preferred investements in the zone.

Mactan Export Processing Zone (MEPZ)

MEPZ is located on the Mactan Island in the province of Cebu in central Philippines. The zone has 119 hectares and is adjacent to the Mactan International Airport. From Manila, it takes 1 hour flight time. Mactan is a regular port of call for both inter-island and ocean going vessels.

Factories engaged in light manufacturing operations, with raw materials and finished products particularly suited for air shipment are of primary interest to the zone authority.

Baguio City Export Processing Zone (BCEPZ)

BCEPZ is a 63 hectare site located in the highlands of Luzon Island, 250 km north of Manila.

Electronics, precision instruments, and other high-tech enterprises are preferred as their output can easily be airfreight out from Baguio.

(H) Taiwan

Taiwan has three EPZs, all of them have relatively long history. The one in Kaohsiung opened in 1966,

the other two in Nantzu and Taichung followed in 1969. The zones had reached their prime in the 1970's, and all three are now fully occupied.

The key incentive originally offered to all companies in the EPZ was a five-year tax holiday. By 1974 the authority restricted the said incentive to only those investors meeting the criteria for encouraged industries. However, all enterprises in the EPZs still retain some incentives such as 25% income tax ceiling and exemption of import tax on raw materials and machineries. This signified the government's emphasis on a shift towards capital and technology-intensive industries following the huge success enjoyed by the EPZs in the early seventies.

Towards the late 70's, the original EPZ concept was further modified with establishment of science-based industrial parks providing special incentives for sophisticated industries. For example, the Hsinchu Park offers a five-year tax holiday with a four-year grace period and a 22% corporate tax ceiling for the eligible investors.

Kaohsiung EPZ

Taiwan's oldest EPZ is located in Kaohsiung, the

largest industrial city of the country. It is 7 km from Kaoshiung airport and 12 km from Kaohsiung port. The zone is fully occupied with over 100 firms in operation.

Taichung EPZ

Located in the middle of Taiwan's west coast, 16 km from Taichung airport and 26 km from harbor. It is also fully occupied with about 50 firms.

Nantzu EPZ

Located 26 km from Kaohsiung airport and 24 km from Kaoshiung port. It's at fully occupancy with over 100 factories.

In all three zones, the permitted industries are similar and listed below. It is an evidence of the government's effort in discouraging low value added industries :

Precision machinery and instruments, electronics, opticals, metals, furniture, electrical and office appliances, yachts, mobile homes, food, cosmetics, leather and rubber products.

(I) Korea

Korea has two EPZs, the Masan Free Export Zone and Iri Free Export Zone. The preferred investors are those industries with definite export prospects, high foreign exchange earnings, and advanced knowhow. Owing to the generally favorable business climate and much less red tape, the zones have been successful in attracting investors. As such, attracting additional companies to the zone is no longer a high priority with the government.

Masan Free Export Zone

It's located 185 miles southeast of Seoul and 30 miles west of Pusan Port, has an area of 233 acres.

The zone is fully occupied with about 100 firms in which Japanese companies predominate. Tax concessions are virtually the same as those applicable to firms with foreign investments outside the zone.

Iri Free Export Zone

120 miles southwest of Seoul and 15 miles east of Kunsan, has an area of 78 acres. Conditions are similar as in the Masan Zone.

CHAPTER 5

Summary on the EPZs' achievements

In gathering data for the summary, it is discovered that some EPZs are so new that sufficient data and even general information are lacking. They are Thailand, Malaysia and Pakistan. Of these three countries, Malaysia's EPZs are known to be successful whereas her Pakistan counter part is considered to be a complete failure. Due to its overemphasis on the Middle East Market, when the oil prices dropped, the economy in Pakistan's EPZ began to deteriorate rapidly.

Apart from the above three countries, we are able to collect data for seven EPZ's in six countries and summarize them into 3 tables. The 7 EPZs in these three tables are :

1. Katunayake Investment Promotion Zone : Sri Lanka
2. Santa Cruz Electronics EPZ : India
3. Pelabuh Nusantara EPZ : Indonesia
4. Bataan EPZ : Philippines
5. Nantzu EPZ : Taiwan
6. Kaohsiung EPZ : Taiwan
7. Masan EPZ : Korea

Table 2 measures each of the seven EPZs' economic achievements at the end of its 5th year period after establishment. Data are still missing from India, Indonesia and Sri Lanka. The key indicators in this table will be the "Return on Investment" and the "Export/Worker", which will be discussed later.

Table 3 gives a summary of the favorable conditions as well as the unfavorable conditions of each EPZ based on a comparison of EPZs in different countries.

Table 4 is a simple matrix on all the incentives/regulations provided by each EPZ. Again, most information are valid through the end of the 5th year period after establishment of the zone, which is our comparison basis.

TABLE 2 ②

COMPARISON OF EPZ'S IN ASIA
(PERFORMANCE AFTER 5 YEARS)

PLACE / ITEMS	SRI-LANKA	INDIA	INDONESIA	PHILIPPINES	TAIWAN	TAIWAN	KOREA
NAME OF EPZ	KATUNAYAKE INVESTMENT PROMOTION	SANTA CRUEZ ELECTRONICS EPZ	PELABUH NUSANTARA EPZ	BATAAN EPZ	NANTZU EPZ	KAOSHIUNG EPZ	MASAN EPZ
START-UP YR	1987	1974	1974	1969	1969	1966	1970
AT THE END OF 5TH YR.							
1. YR. EXPORT	US$54.3M	9.3M	?	11M	92M	345M	235M
2. INVESTMENT	?	?	?	US$88M	63M	65M	89M
RETURN ON INVESTMENT	?	?	?	0.125	1.46	5.3	2.6
3. NO. OF FACTORIES	70	38	20	22	100	147	100
4. NO. OF EMPLOYEES	35000	2500	7000	6000	15000	42500	20000
EXPORT/WORKER	US$1550	3720	?	1833	6130	8118	11750
MAJOR EXPORTS :	- GARMENT - ELECTRONICS - ELECTRICALS	- VIDEO FIRMS - MAGNETICS RECORDINGS	- PRECISION MACHINARIES	- LIGHT IND'L - ELECTRONICS	- NON POLLUTING - NON-LABOR INTENSIVE		- NON FERROUS METAL

TABLE 3 (3)

COMPARISON OF EPZ'S IN ASIA
FAVORABLE VS NON FAVORABLE
CONDITIONS

	SRI-LANKA	INDIA	INDONESIA	PHILIPPINES	TAIWAN NANTZU	TAIWAN KAOHSIUNG	KOREA
VORABLE	- HIGH INCENTIVES - ABUNDANT LABOR	- GOOD RESIDENTIAL AREA - GOOD INFRA-STRUCTURE	- LITTLE RED TAPE	- LOW COST LABOR - PRODUCTIVE WORKFORCE - FREE CURRENCY FLOW - GOOD INCENTIVES	- STABLE GOVERNMENT - HIGH SKILLED LABOR - COMPLETE INFRA-STRUCTURE - MANY PROFESSIONALS - LITTLE RED TAPE		- SKILLED LABOR - PROFESSIONALS
ON - AVORABLE	- POLITICAL INSTABILITY PARTIES CHANGE TOO FREQUENTLY - LIMITED IND'L BASE - SHORTAGE OF MGMT.	- BUREAU-CRATIC - LITTLE INCENTIVES - HISTORY OF LABOR DISRUPTION	- LITTLE OTHER INCENTIVES	- SHORT LAND LEASE - NO LAND OWNER-SHIP - POWER SUPPLY, FREQUENT BLACKOUT	- HIGH LABOR TURNOVER		- LABOR COST HIGH

GOVERNMENT PAY LITTLE ATTENTION

④

TABLE 4

COMPARISON OF EPZ'S IN ASIA — REGULATIONS

	SRI-LANKA	INDIA	INDONISIA	PHILIPPINES	TAIWAN NANTZU EPZ	TAIWAN KAOHSIUNG EPZ	KOREA MASAN EPZ
NAME OF EPZ	KATUNAYAKE INVESTMENT PROMOTION ZONE	SANTA CRUZ ELECTRONIC EPZ	PELABUH NUSANTARA EPZ	BATAAN EPZ			
CORP. INCOME TAX	NA	NA	NEGOTIABLE	30 - 40%	25% MAX	25% MAX	16.5-27.5%
TAX HOLIDAY (YR)	10	5	NEGOTIABLE	NIL	5	5	5
RENT IN 1982 PER SQ M.	US¢6/M	US¢95/M	US¢8/M	US¢5.1/M	US¢20/MONTH		NA
LAND LEASE YR.	99	5.30	NEGOTIABLE	15	NA	NA	NA
DOMESTIC MKT.	YES	NA	NA	NO	NO	NO	NO
LABOR COST/DAY	US$1.00	US$1.00	US$1.5	4.5	4.0	4.0	
OTHER INCENTIVES	- NO TAX FOR 5 YRS. - 2% EXPORT TAX AFTER 5 YRS. 5% EXPORT TO DOMESTIC MKT. - NO TAX TO INTERTEST EARNED BY FOREIGN SHARES	NA	NA	- FULL LIQUID. OF ASSETS WITHIN 48 HRS.	- AFTER TAX INCOME 100% TRANSMITTED OUT - 15% OF INVESTMENT CAN BE TRANSFERRED OUT AFTER 3 YRS.		- PERSONAL INCOME TAX WAIVED FOR 1ST 5 YRS. - FOREIGNER TAX WAIVED

Data Conclusion

In table 2, two indicators are used to measure the achievements of the EPZs. The "Return on Investment" measures the return on every dollar invested. At the end of the 5th year period, the 3 zones in Taiwan and Korea all had a positive return of over US $1 to $5.3. Philippines has a return of US$0.125, which is a questionable one to us. The other three countries (Indonesia, India and Sri Lanka) do not have enough investment data to support any conclusion.

To complete the comparison, a second indicator, "Export/Worker" is used. It is similar to the "Income/Capita" used in the economic measurement of a country. From the results shown, we can see that there appears to have a 3-way distribution. Taiwan & Korea lead the rank with US$6,000 - 12,000, India comes in second with an achievement of US$3,720 per capita. The third class will be Sri Lanka and the Philippines, with Export/Worker only at US$1,550-1,833.

Although we cannot make conclusion about the level of achievements of Sri Lanka, India, Indonesia, and Philippines due to insufficient data, we can say that Taiwan and Korea are standing away from the rest of the team in the above 2 quantitative measurements. An initial

conclusion would be : It takes a ratio of greater than 1 on the "Return on Investment" and an "Export/Worker" of over US$6,000 to be a successful EPZ.

From the available results which include the quantitative analysis from elsewhere similar to the above, Taiwan & Korea always represent the successful model of EPZ. Pakistan and Indonesia always appear to be the unsuccessful EPZ due to its wrong market target (Pakistan's Middle East Market became to be wiped out when oil prices dropped) and the absenc of enthusiastic government support (Indonesia). The performances of some EPZs, like India, Philippines and Sri Lanka are questionable. From Table 3, we can see that these questionable ones have more unfavorable conditions for investments. Most of them are government related, such as : political instability, bureaucracy, and the lack of attention from government. On the other hand, Taiwan & Korea have strong support from the government, have enough skilled labor and professionals, good incentives for investors, and complete infrastructure etc.

If we also look at Table 4, a comparison on all the regulations/incentives provided by each EPZ, we find that both Taiwan and Korea have clearly spelt out incentives, although some may not be as attractive as that of other

EPZs'. The less successful EPZs are normally ambiguous about regulations probably due to the weakness and administrive insufficiency of the governments. For example, Indonesia states that most regulations are "negotiable". This will create the chance of having collusion during the negotiation, and hence stopping investors from dealing with the EPZ.

From the tables above, we try to draw a successful model of EPZ basing upon the Taiwan and Korean profiles, and a less successful on using India, Indonesia, Sri Lanka, and Philippines as the basis.

(A) Successful EPZ Model : (figures measured at the end of the 5th year period)

- Export/Worker greater than US$6,000
- Return on Investment greater than 1, preferrable in the 2 to 5 range
- Good geographical location
- Politically stable
- Government support with long term development Policies clearly spelt out
- Strong local administrative organization
- High incentives
- Abundant low cost labor, professionals
- Availability of base industries and infrastructure

(B) Less Successful EPZ Model :

- Export/Worker below US$3,000
- Unenthusiastic government support
- Changing political parties
- Shortage of managerial talents
- labor disruption
- bureaucratic
- red tape

It seems that the EPZ failure are mostly contributed by political factors rather than physical conditions of zones.

In the second part of this paper, we will use the two models to apply to the China Shenzhen SEZ. The purpose is to identify whether Shenzhen bears any characteristics of A or/and B stated above. Hopefully we can discuss its achievements/failures/future in relation to the two models above.

Section (III)

China and its Special

Economic Zones

CHAPTER 6

The Geographical and Economic Development in China

China has been an agricultural country in the last 4000 years. The industries in China was still in its infant stage at the turn of the century. Before the take over of red China in 1949, China had been developing its industries along the coastal lines from Northeast to Southeast. More than 70% of its industrial development took place into this belt shape area. The inland and the areas adjacent to the Soviet Union had been largely ignored. This kind of economic development imbalnace was noted by the People's Republic of China and efforts were made in shifting the industrial development back to inland. There were basically 2 reasons. One was that PRC did not want to have too many eggs in one basket. Second being the country needs to diversify and to fully utilize its unused, undeveloped abundant natural resources to better the lives of the poor population.

From 1952 to 1978, China went through its 4 5-year economic plans. The emphasis to shift the locality of industrial development was noted. In table 5 on Pg. 33, we can see that the % of total Capital Investment in China was increasing steadily in inland during the 4 5-year

economic plan, whereas the investments in the coastal areas were decreasing. The reasons for this change lies in the convenience of using inland mining in developing heavy industries and the need to strengthen national security for establishing military industry in inland (ShiChuan). During these 26 years, the coastal areas' economic development was virtually in a static stage eventhough the output value still maintained. From 1979 on, China set out its open door policy after the "Gang of Four" was wiped out and Deng Xiao Ping took power. The necessity to invest into the coastal cities to attract foreign investors to fulfil the open door policy suddenly changed the China's economic emphasis 180° back from inland to coastal. From the same table, we can see that coastal investments were rising back from 42.5% in the 4th economic plan to 47.89% in 1979 and maintained 50.84% and 49.31% in 1982 & 1983, respectively. The set up of the 4 Special Economic Zones in the Southern part of China and the 14 open cities along the coast were the results of the shift in economic policy. This established the background for the development history of China's economy.

Year	1st FYP 1953-57	2nd FYP 58-62	3rd FYP 66-70	4th FYP 71-75	79	82	83
Coastal	46.65%	44.13	31.51	42.53	47.89	50.84	49.31
Inland	53.35%	55.87	68.49	57.47	52.11	49.16	50.69

Table 5 ⑤ Distribution of China's Capital Investment by selected areas by period

FYP = Five Year Plan

CHAPTER 7

The SEZ development in China

The idea of setting up the SEZ in China did not come abruptly. It was cultivated during the mid 70's when the Chinese Government gradually realized that they needed to shift the heavy investment in inland back to the coastal areas. In table 5, we can see that the coastal investment during 71-75 was 42.53%, compared to the 31.51% in 66-70. This move was also implemented to cope with the Four Modernization proposed in early 70's. After the death of Mao Tse Tung, the implemenation of the four modernizations was formally written into the Communist Party's 11th National Party Congress in 1977. In August 1980, the 5th National People's Congress approved the establishment of China's first SEZ in Shenzhen. And the name "Special Economic Zone" was confirmed for the first time. During the congress, the then General Secretary of the Communist Patry Zhao Zi Yang officially outlined the principles and the spirits of open door policy. The setting up of the four special economic zones (Shenzhen, Zhouhai, Shantou and Xiamen) was an outcome of the 1980 congress. It is interesting that in the beginning, the SEZ's setup was rather local and the Central government was rather passive in exerting administrative control. It was in 1982,when the British Prime Minister Margaret Thatcher visited

Beijing to negotiate the return of Hong Kong after 1997, that the Chinese government began to involve more actively in the policy setting, monitoring, and even publicizing the SEZ, especially in Shen Zhen. Most scholars believe that it is a strategy of China to turn Shenzhen into a beachhead toward modernization and Capitalism, and to provide a smooth transition for Shenzhen to cope with the systems in Hong Kong. Hopefully, when China takes over of Hong Kong in 1997, Shenzhen will have its system already developed to be in syncronization with Hong Kong. If this strategy is successful, similar tactics will be used for the return of Macau, and eventually Taiwan under Chinese Soveignty.

So the implication of setting up SEZ in Shenzhen is more than economic, it is mainly political.

CHAPTER 8

The Shenzhen SEZ

(A) History & Overview

It was on the penisula of Shekou*, located west of Shenzhen, that the development of Shenzhen SEZ started. In 1979, the China Merchants Steam Navigation (CMSN) Company Ltd. of Hong Kong was seeking a deep water harbor for its expanding ship-breaking business and its huge metal melting furnance, for doing so was not physically possible in Hong Kong anymore. The company approached the China State Council to propose that they would invest into Shekou. The proposal was subsequently approved by the Council and CMSN was given 2 sq km of land in Shekou and was asked to invest US$5M to start the project. This was the first foreign investment project after the open door of China in 1979.

Encouraged by the success of this project, the Central government made a move to include the Shekou area into the Shenzhen SEZ when the policies were set up in 1980. The zone has 327 sq km of land. It was originally a quiet border town with very few residents. Even in the beginning of the development

stage, the state government only estimated to build the town into a moderate size with approximately 200,000 to 300,000 residents at the end of this century. But by 1985, the census showed that Shenzhen already had 191,000 residents. This did not include the 146,000 from other provinces who live there temporarily.

The development of Shenzhen can be briefly divided into the following stages.

(i) Established the initial urban planning :

Shenzhen had invited some 100 specialists to participate in this initial phase of development

(ii) Launched a large scale construction of city facilities and other basic infrastructure

(iii) Draft the special administration laws for the SEZ which included import/export, tax laws, company laws, joint venture laws and technology import laws etc.

(iv) Established a new administration government

* See map of Shenzhen SEZ on Pg. 38a.

MAP OF SHENZHEN SEZ & HONG KONG

endowed the local government with more authority and flexibility in operation.

(v) Started to attract foreign investments and foreign technology through joint venture (JV) establishments.

(vi) Developed other basic industries to support the high-tech transfer.

(vii) In order to attract more labor, the Government differentiated the income level of SEZ workers from the rest of the country. People in general had a higher living standard in Shenzhen SEZ.

Such large scale development started in 1981 resulted in a big wave of investments from outside. At the end of the first half of 1985, the total JV signed accumulated to 4087 with actual investments accumulated up to US$700 million.

(B) Geographical Environment

Shenzhen is located in the Southern part of the China coastal lines. It belongs to the Bo'an county and is attached to Hong Kong's New Territories. Shenzhen is the largest SEZ out of the four already established

SEZs in China. The climate of Shen Zhen is much like Hong Kong's, being hot and humid in the summer, dry and cool in the winter.

In fact, not only does Shenzhen resemble to Hong Kong in terms of climate, it also has a lot of basic infrastructure which either relies on Hong Kong or is built according to the blue prints of Hong Kong. For example, its electricity supply is from China Light & Power in Hong Kong; the highways are the continuity of Hong Kong's; Shenzhen needs to use Hong Kong's container port for large scale ocean shipment; its banking facilities are closely tied in with the Hong Kong banks. They also connect and share the telecommunication with Hong Kong on telephones, telex and fax. Needless to say, the residents there are largely of the same species of Hong Kong, i.e. - Cantonese. which also facilitates the convenience of communications.

CHAPTER 9

The Economic System & the Economic Growth in Shenzhen SEZ

(A) The Economic Systems

The economic systems in Shen Zhen are largely based on foreign investments attracted in by the different level of incentives. In order to suit the needs for different types of business, the local government developed some very creative ways of letting the foreign investors do business in Shenzhen. There are 5 types of industrial investments.

(i) Processing trade :

The investors consign raw materials, or semi-finished products to the Chinese to assemble and package the goods according to the investors' specifications. The investors are charged with processing fees.

(ii) Compansation Trade :

The Chinese partner is responsible for

providing factory buildings and labor, while the foreign investor supplies production equipment, technology, management personnel & even raw materials if necessary. The foreign partner is paid by installments by means of the products produced for his equipment, technology etc. until the investment is all paid off. The equipment will then belong to the Chinese partner. The foreign investor normally will have the right to buy any further products at an agreeable discount price for his overseas markets.

(iii) Contractual Joint Venture :

The Chinese partner provides land, natural resources, labor etc, while the foreign partner will provide key equipment, materials, management etc. The liability, rights and obligations are spelt out in the contract. Revenue, profit and loss are also distributed according to the terms and conditions in the contract.

(iv) Equity Joint Venture :

This form of JV is similar to the above, except this takes the form of a limited liability corporation with the status of a legal entity. Under the Chinese Law on Foreign Investment, the shares of foreign participants shall in general be not less than 25%.

(v) The 100% owned foreign subsidary

During the first five years of the SEZ operations, most investments took place in the form of compansation trade and processing trade. This is largely because the confidence of the outside investors had not been established. And among the two types of Joint Ventures and the 100% owned foreign subsidiary, the statistics showed that the latter one had the least percentages and the equity JV came in second with contractual JV being the most propular one. Table 6 shows the details:

Form of Investments	1979	1980	1981	1982	1983	total
Equity JV	7	4	13	11	92	127
Contractual JV	30	24	39	47	149	289
100% owned foreign subsidy	NIL	5	18	8	13	44
Processing Trade /compansation Trade	133	270	508	517	624	2052
TOTAL	170	303	578	583	878	2512

⑥

Table 6 Foreign investment in Shen Zhen by forms by year

Within the JV, theoretically speaking, the foreign partners have no maximum shares as long as they can meet the minimum requirement of 25%. In the real life, however, they are seldom allowed to occupy more than 50%. Table 7 shows the statics :

% Foreign ownership in JV	1979 - 1983
51 to 99% owned	11%
50% owned	30%
Less than 50% owned	59%

⑦

Table 7 % of share of foreign ownership in JV from 1979 to 1983

The "lack of confidence" of foreign investors is not ungrounded. In the first few years, the Chinese government imposed the laws stating that the chairman of any JV must be Chinese; that the Chinese managers must get equal pay as the foreign managers; that there are more foreign exchange control; and that there will be several deduction on profits before the money can be remitted out. Furthermore, the fact showed that the JV in China seldom made a profit over 20% in those few years. Another implication is that foreign partners in most technology JV would be more interested in doing processing technology in SEZ rather than in product technology. This was due to the fact that 100% ownership investment was hard to approve and that the JV's normally experience more Chinese control than they would like to see. The net of all that is China did not see as much technology transfer in high-end product as they expected from their foreign partners.

To clear the smoke, in late 1986, Chinese government announced 22 rules to further deregulate the investment restrictions. This should have a positive effect on the investment climate.

To sum up, the incentive package that Shenzhen SEZ gives to outside investors is as follows :

(1)	Corporate Profit Tax	15%
(2)	Tax Holiday	1 to 5 years
(3)	Labor Wage	About US$100 per month
(4)	Duties	No import tax as long as the raw materials, goods are for export
(5)	Rent on Land	US$30-100 per sq m per year
(6)	Lease Term	20-50 years
(7)	Management Autonomy	right to hire foreign technical & mgmt staff, hire & fire local staff
(8)	Repatriation of Profits	All profits after tax can be repatriated

(B) The Economic Growth of Shenzhen SEZ

Shenzhen SEZ differs from other EPZ at least in one aspect, i.e. the variety of business the SEZ has. The following table shows the breakdown in investment sector for Shen Zhen from 1979 to 1983.

Manufacturing	43.6%
Service	7.5%
Transportation	1.2%
Real Estate	26.5%
Tourism	5.1%
Agriculture	1.5%
others	14.6%

Table 8 (8) Breakdown in foreign investment in Shen Zhen by sector 1979-1983

To measure the results of the Shenzhen SEZ is not an easy task. The main reason is that data are not easy to obtain and there is not a central source that can confirm the correctness of the data. We managed to obtain some data from 1979 to 1983, in the following table.

	1979	1980	1981	1982	1983
No. of agreements signed	170	303	578	583	878
Gross output US$	NA	NA	65.1M	NA	195M
Actual Investment US$	15.4M	30.1M	76M	113M	145M
Return on Investment	NA	NA	0.85	NA	1.35
No. of factories	NA	NA	267	NA	443
No. of workers	NA	NA	12000	NA	25000
Output/worker US$	NA	NA	5417	NA	7800

(9)(10)(11)

Table 9 Summary on Shenzhen SEZ's industrial and economic growth

From the table, we can see that the SEZ did not have an impressive start, much of the investment dollar in industries was not realized until 1982-83 time-frame. For example, in 1981, the return on investment was still running at a below 1.0 level, meaning a loss of money. In 1983, the number rose to 1.35, which is close to the same figure for Taiwan's successful Nantsu EPZ at the end of the 5th year. The productivity measurement was high since the beginning. In 1981, it already reached a respectable level of US$5,417 per worker, indicating that the

effectiveness of Chinese labor is on the average higher than most other EPZ's. It also means that Shenzhen should be a good choice for labor intensive jobs.Becasue of the ethnic ties with the Hong Kong and overseas Chinese, more than 80% of the investment money were from Hong Kong or through Hong Kong. Of course, the continued expansion of Hong Kong export industry and the limitation of land usage, high salary drove many Hong Kong manufacturies to invest in Shenzhen and move the low-tech jobs there. This China/Hong Kong leverage benefited both the China and Hong Kong export performance. In fact, Hong Kong set a record high of 33% increase in year to year export in 1987. The main reason was the above leverage.

SECTION (IV)

The Comparison

CHAPTER 10

A comparison between the Shenzhen SEZ & the EPZ's in Asia

(A) Objective Comparison

In section II Chapter 3, we stated the primary objectives of setting up EPZs in Asia. They are repeated as follow :

(i) To attract foreign investments
(ii) To promote & develop export
(iii) To create job opportunities
(iv) To facilitate transfer of technology

Shenzhen SEZ bears all the above 4 objectives when setting up the zone. But our research from many documents also shows that there is an underlying political objective for setting up the SEZ which is as important as the above four. Shenzhen SEZ is actually a laboratory to test the capitalistic system in a communist country. If successful, this will be implemented to the rest of the nation starting from the other coastal citites.

Another objective which is also political is that the SEZ serves as a test ground for the unification of the overseas Chineses and the Hong Kong Chinese. This is proven successful when one looks at 80% of the foreign investments in Shenzhen was from Hong Kong or overseas Chinese.

The ultimate objective, however, is to develop the SEZ strategy so that one day Taiwan can be reunited under this system.

(B) Quantitative Comparison

In Section III Chapter 5, we created 2 models. One is the so called "Successful EPZ Model", and the other one is the "Less Successful EPZ Model". There, 2 economic indicators were used :

		Successful
Return on Investment	>	1.0
Output / Worker	>	US$6,000

At the end of the 5th year period after establishment.

This was based on the figures of Taiwan & Korea EPZs, which we consider to be successful in Asia. We then look at the same figures from Shenzhen :

1.35 on the return on investment in 1983

and

US$7,800 on the output/worker in 1983

The figures in fact come very close to the ones for Nantsu in Taiwan. We can say that the Shenzhen SEZ clearly stands out from the Philippines, India, Indonesia, Sri Lanka, and resembles much to the the initial stage of Masan in Korea, Kaohsiung and Nantsu in Taiwan, a very strong start.

(C) Qualitative Comparison

Again, if we refer to the 2 models built in Chapter 5, we can do the following.

Successful EPZ	Shenzhen SEZ
- Good Geographical Location	Yes
- Political Stability	Yes since 1979
- Government Support with long term development policies clearly spelt out	Yes, incentive kept being reviewed, see Chapter 9, The economic systems
- Strong Local Administrive Organization	Yes, Shenzhen is rather independent from central government
- High incentives	Medium
- Abundant Low Cost Labor, Professionals	Yes, on labor No, on professional
- Base Industries & Infrastructure	Moderate / infrastructure good

Table 10 A Comparison Chart to measure the Level of ingredients of successful EPZ that ShenZhen has

Unsuccessful EPZ :	Shenzhen SEZ
- Government Lack of Interest	No
- Changing Political parties	No, so far stable
- Shortage of Management	Foreign hired
- Labor disruption	No, not allowed
- Bureaucracy	Yes, to some degree
- Red tapes	Not much

Table 11 A Comparison Chart to measure the Level of ingredients of unsuccessful EPZ ShenZhen has

From the above comparison, Shenzhen is in most areas carrying the successful model's characteristics. The main items that are a little behind are

- Supply of professionals
- Base industries
- Bureaucracy

Fortunately, the local government has been trying very diligently to resolve these problems. More and more professionals are being assigned in the SEZ from SZE Chuan, the military

base, and the Northeastern part of China, which is known as the heavy industry base. The fact that Shenzhen has recently loosened its restriction on foreign management to China also helps easing the first two problems. Although it is unavoidable to have bureaucracy in any government especially in such a big country, the Chinese government continues to try hard to reduce the level of it. In 1986, 22 rules were announced to lessen the restriction and paper work for foreign investors. This is an indication that the government is still euthusiastic in building the SEZ to a success. With the current thrust that China has, one should view that the Shenzhen SEZ will continue to grow positively.

(D) Other Observations

There are some other characteristics of Shenzhen SEZ observed during the research but were not noted when comparing Shenzhen with the 2 models.

One observation is that Shenzhen SEZ markedly differs from other EPZ in terms of its domestic market opportunities. Most investors doing business in other EPZs are with the hope that

the products can be made cheaper and hence have stronger competitiveness when being shipped and sold in oversea markets. Seldom do they think of opening up the host country's market. In contrast, almost all investors in Shenzhen hope that one day they can sell what they make in Shenzhen to China. This is certainly not a silly dream considering China has a vast market potential.

Second observation is that most EPZs are oriented toward manufacturing only. Shenzhen is different.

Table 8 gives us a breakdown on the different types of business people invested in. Shenzhen in fact is more of a multi-sector manufacturing and service industry SEZ. This is a new concept and has never been found in other EPZ in the initial set up stage.

The third observation is that the investments have been mostly confined to Chinese Sources. We were not able to find any other EPZ in Asia attracting investment capitals from its own nationals. Even though the oversea Chinese do not live in PRC, they share the same ethnic ties

with China. It is much easier for the government to convince them rather than the westerners to invest. The success of Shenzhen SEZ was of course also contributed by the China/Hong Kong leverage package offered to the Hong Kong industrialists.

Lastly, a minor finding is that most EPZs do not have a fence or restricted border for their citizens to commute to work daily. In Shenzhen, it is different. Almost all Chinese workers are assigned to work there from elsewhere and they live in factory-provide domitories. The Chinese mentality of being afraid of losing face when they get fired and return to the homeland makes labor workers work harder. This probably tells why the Shenzhen SEZ has such a high productivity.

SECTION (V)

Conclusion

CHAPTER 11

Conclusion

The strongest part of Shenzhen SEZ is that it has a very independent local government to support its growth. The development of SEZ always get central government's attention. Shenzhen also resembles other successful EPZs, such as Taiwan's and Korea's, in the area of having well developed infrastructure, cheap and disciplined labor force, and quite attractive incentives etc. Above all, Shenzhen has the utmost advantage of having Hong Kong as its next door neighbour. Needless to say, the cordial relationships between the British and the PRC governments provide lots of convenience to Shenzhen. Telecommunication network, highway systems, container port, airport, management, "capitalistic mentality", efficiency, pace - all provide great infrastructural help for Shenzhen to move faster than other EPZs. Without Hong Kong being in its proximity, Shenzhen would not have achieved what it is now.

But Shenzhen is not without its weaknesses. From personal contacts with investors, people who work there, and Shenzhen government officials, there are several areas the SEZ has to improve.

- The need for longer and broader eye sight for local government :

  considerations more on the Nation's benefits rather the SEZ's

- Lack of knowledge of modern business practices and international laws

- Too much verbal agreements, creating unnecessary mis-intepretations

- Weakness in planning and coordination

- Insufficient laws in governing the growing complex business nature

- Bureaucracy

- Quality of labor for high-tech

- Lack of management

- Need to open up domestic market quicker

We do not expect to see all these changed tomorrow. With the strongest asset, "the enthusiasm" from the government, and the sincerity and flexibility for change, the future of the SEZ looks bright. The General Secretary, Zhao ZiYang's visit to Shenzhen recently further confirms the determination of the government to improve the system and to make Shenzhen a success story. What it then needs is a stable political system and consistent policies, along with the foreign investors' mutual understanding and patience. One should be confident that Shenzhen can become another successful EPZ such as Taiwan's or Korea's, in the foreseeable future.

Deng Xiao Ping once said, "SEZ is a window, a window for technology, a window for knowledge, a window for management, and a window for open door policy".

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